



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/975,940	11/21/1997	ALFRED D. COMMINS	SST/816	1225

7590 03/28/2008  
JAMES R CYPHER  
1607 FINANCIAL CENTER BLDG  
405 14TH STREET  
OAKLAND, CA 94612

EXAMINER
----------

CAJILIG, CHRISTINE T

ART UNIT	PAPER NUMBER
----------	--------------

3633

MAIL DATE	DELIVERY MODE
-----------	---------------

03/28/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 08/975,940	<b>Applicant(s)</b> COMMINS ET AL.	
	<b>Examiner</b> CHRISTINE T. CAJILIG	<b>Art Unit</b> 3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2008, 19 October 1999.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 36-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 47 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 1997 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/02/08</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 1/02/08 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 36, 37, 41, 42, and 44-46 are rejected under 35 U.S.C. 103(a) as being obvious over Mueller (U.S. Patent No. 5,706,626) in view of Horowitz (U. S. Patent No. 3,623,288).

Regarding claim 36, Mueller discloses a wall (Fig. 5) designed to resist lateral forces imposed on a building incorporating said wall, said building having an underlying structural component for supporting said wall, said wall comprising: a. a bottom plate (161) for resting on said underlying structural component of said building; c. a plurality

Art Unit: 3600

of vertically-disposed studs (160a, 160b) resting on said bottom plate; e. a top plate (162) resting on said vertically-disposed studs; g. a shear-resisting assembly (details in Figs. 1 and 2) connected to said top plate (via element 164) and also for connecting to said underlying structural component and for being disposed between said top plate and said underlying structural component, said shear-resisting assembly including, 1. a planar shear-resisting element (110a), said planar shear-resisting element having a proximal face and a distal face, a top edge, a bottom edge and first and second side edges, said shear-resisting assembly also including, 2. a top strut (104) connected to said proximal face near said top edge of said shear-resisting element, and disposed substantially parallel to said top plate of said wall, 3. a bottom strut (106) connected to said proximal face near said bottom edge of said shear-resisting element, 4. a first chord (115, 120) connected to said proximal face near said first side edge of said shear-resisting element, 5. a second chord (115, 120) connected to said proximal face near said second side edge of said shear-resisting element, and 6. screws (124) for connecting said top strut, said bottom strut, and said first chord and said second chord to said shear resisting element, said top and bottom struts and said first and second chords forming a supporting frame for said shear-resisting element; h. top plate fasteners (152), having a threaded shank portion, for connecting said shear-resisting assembly to said top plate of said wall; and i. one or more foundation anchors (166a) for connecting said shear-resisting assembly to said underlying structural component of said building. Mueller does not disclose b. a foundation anchor for connecting said bottom plate to said underlying structural component of said building; d. nails for

connecting said plurality of vertically-disposed studs to said bottom plate; and f. nails for connecting said top plate to said vertically-disposed studs; and 6. nails for connecting said top strut, said bottom strut, said first chord and said second chord to said shear-resisting element. However, it is old and well known in the art that structural components of a building are connected together via nails to create a sturdy, unified structure. Nonetheless, Horowitz discloses a wall with a foundation anchor (62) for connecting a bottom plate to an underlying structural component of said building; nails for connecting horizontal and vertical framing members together (Col 5, Ln 34-40) to hold all of the framing members securely in a permanent connection. Therefore, it would have been obvious to a person having ordinary skill in the arts at the time of the Applicant's invention to modify the structure of Mueller to have a foundation anchor for connecting said bottom plate to said underlying structural component of said building; nails for connecting all horizontal and vertical framing members together as taught by Horowitz to provide stable permanent connections.

Regarding claim 37, Mueller discloses a wall (Fig. 5) designed to resist lateral forces imposed on a building incorporating said wall, said building having an underlying structural component for supporting said wall, said wall comprising: a. a bottom plate (161) for resting on said underlying structural component of said building; c. a plurality of vertically-disposed studs (160a, 160b) resting on said bottom plate; e. a top plate (162) resting on said vertically-disposed studs; g. a shear-resisting assembly (details in Figs. 1 and 2) connected to said top plate (via element 164) and also for connecting to said underlying structural component and for being disposed between said top plate and

Art Unit: 3600

said underlying structural component, said shear-resisting assembly including, 1. a planar shear-resisting element (110a), said planar shear-resisting element having a proximal face and a distal face, a top edge, a bottom edge and first and second side edges, said shear-resisting assembly also including, 2. a top strut (104) connected to said proximal face near said top edge of said shear-resisting element, and disposed substantially parallel to said top plate of said wall, 3. a bottom strut (106) connected to said proximal face near said bottom edge of said shear-resisting element, 4. a first chord (115, 120) connected to said proximal face near said first side edge of said shear-resisting element, 5. a second chord (115, 120) connected to said proximal face near said second side edge of said shear-resisting element, and 6. means (124) for connecting said top strut, said bottom strut, and said first chord and said second chord to said shear resisting element, said top and bottom struts and said first and second chords forming a supporting frame for said shear-resisting element; h. means (connecting plate 164) for connecting said shear-resisting assembly to said top plate of said wall; and i. a foundation anchor (166a, 166b) for connecting said shear-resisting assembly to said underlying structural component of said building, said foundation anchor being designed to transmit lateral forces imposed on said underlying structural component to said shear-resisting assembly, and wherein said bottom strut (106) is formed with an opening through which said foundation anchor passes, and said opening (through which bolt 166 is inserted) in said bottom strut is a notch in said bottom strut that allows said bottom strut to slide into place. Mueller does not disclose b. means for connecting said bottom plate to said underlying structural component of said building; d.

Art Unit: 3600

means for connecting said plurality of vertically-disposed studs to said bottom plate; and f. means for connecting said top plate to said vertically-disposed studs. However, it is old and well known in the art that structural components of a building are connected together via known fasteners to create a sturdy, unified structure. Nonetheless, Horowitz discloses a wall with a means which is a foundation anchor (62) for connecting a bottom plate to an underlying structural component of said building and fasteners for connecting horizontal and vertical framing members together (Col 5, Ln 34-40) to hold all of the framing members securely in a permanent connection. Therefore, it would have been obvious to a person having ordinary skill in the arts at the time of the Applicant's invention to modify the structure of Mueller to have a means for connecting said bottom plate to said underlying structural component of said building and fastening means for connecting all horizontal and vertical framing members together as taught by Horowitz to provide stable permanent connections.

Regarding claim 41, Mueller discloses a wall (Fig. 5) designed to resist lateral forces imposed on a building incorporating said wall, said building having an underlying structural component for supporting said wall, said wall comprising: a. a bottom plate (161) for resting on said underlying structural component of said building; c. a plurality of vertically-disposed studs (160a, 160b) resting on said bottom plate; e. a top plate (162) resting on said vertically-disposed studs; g. a shear-resisting assembly (details in Figs. 1 and 2) connected to said top plate (via element 164) and also for connecting to said underlying structural component and for being disposed between said top plate and said underlying structural component, said shear-resisting assembly including, 1. a

Art Unit: 3600

planar shear-resisting element (110a), said planar shear-resisting element having a proximal face and a distal face, a top edge, a bottom edge and first and second side edges, said shear-resisting assembly also including, 2. a top strut (104) connected to said proximal face near said top edge of said shear-resisting element, and disposed substantially parallel to said top plate of said wall, 3. a bottom strut (106) connected to said proximal face near said bottom edge of said shear-resisting element, 4. a first chord (115, 120) connected to said proximal face near said first side edge of said shear-resisting element, 5. a second chord (115, 120) connected to said proximal face near said second side edge of said shear-resisting element, and 6. means (124) for connecting said top strut, said bottom strut, and said first chord and said second chord to said shear resisting element, said top and bottom struts and said first and second chords forming a supporting frame for said shear-resisting element; h. means (connecting plate 164) for connecting said shear-resisting assembly to said top plate of said wall; i. means (172) for connecting said shear-resisting assembly to said underlying structural component of said building; j. first and second anchor bolts (166a, 166b) for anchoring to said underlying structural component and are disposed near said first and second chords; k. first and second holdowns (130a, 130b) that receive said first and second anchor bolts; l. nuts (135) that are fitted on said first and second anchor bolts and engage said first and second holdowns; m. holdown fasteners (132), having a threaded shank portion, for connecting said first and second holdowns to said first and second chords, and wherein; n. said bottom strut (106) is formed with anchor bolt openings (through which 166 goes through) through which said first and second anchor

Art Unit: 3600

bolts pass. Mueller does not disclose b. means for connecting said bottom plate to said underlying structural component of said building; d. means for connecting said plurality of vertically-disposed studs to said bottom plate; and f. means for connecting said top plate to said vertically-disposed studs. However, it is old and well known in the art that structural components of a building are connected together via known fasteners to create a sturdy, unified structure. Nonetheless, Horowitz discloses a wall with a means which is a foundation anchor (62) for connecting a bottom plate to an underlying structural component of said building and fasteners for connecting horizontal and vertical framing members together (Col 5, Ln 34-40) to hold all of the framing members securely in a permanent connection. Therefore, it would have been obvious to a person having ordinary skill in the arts at the time of the Applicant's invention to modify the structure of Mueller to have a means for connecting said bottom plate to said underlying structural component of said building and fastening means for connecting all horizontal and vertical framing members together as taught by Horowitz to provide stable permanent connections.

Regarding claim 42, Mueller already modified by Horowitz discloses the structure discussed above, but does not disclose that the threaded holdown fasteners are inserted only a selected distance into the first and second chords without passing all the way through the first and second chords. It would have been obvious design choice to have the threaded holdown fasteners inserted a selected distance into the first and second chords without passing all the way through the first and second chords since applicants have not disclosed that inserting the holdown fasteners through the first and

second chords solves any stated problem and it appears that the structure would perform equally well if the holdown fastener inserted a selected distance into the first and second chords.

Regarding claim 44, Mueller discloses a wall (Fig. 5) designed to resist lateral forces imposed on a building incorporating said wall, said building having an underlying structural component for supporting said wall, said wall comprising: a. a bottom plate (161) for resting on said underlying structural component of said building; c. a plurality of vertically-disposed studs (160a, 160b) resting on said bottom plate; e. a top plate (162) resting on said vertically-disposed studs; g. a shear-resisting assembly (details in Figs. 1 and 2) connected to said top plate (via element 164) and also for connecting to said underlying structural component and for being disposed between said top plate and said underlying structural component, said shear-resisting assembly including, 1. a planar shear-resisting element (110a), said planar shear-resisting element having a proximal face and a distal face, a top edge, a bottom edge and first and second side edges, said shear-resisting assembly also including, 2. a top strut (104) connected to said proximal face near said top edge of said shear-resisting element, and disposed substantially parallel to said top plate of said wall, 3. a bottom strut (106) connected to said proximal face near said bottom edge of said shear-resisting element, 4. a first chord (115, 120) connected to said proximal face near said first side edge of said shear-resisting element, 5. a second chord (115, 120) connected to said proximal face near said second side edge of said shear-resisting element, and 6. means (124) for connecting said top strut, said bottom strut, and said first chord and said second chord

Art Unit: 3600

to said shear resisting element, said top and bottom struts and said first and second chords forming a supporting frame for said shear-resisting element; h. means (connecting plate 164) for connecting said shear-resisting assembly to said top plate of said wall; i. means (172) for connecting said shear-resisting assembly to said underlying structural component of said building. Mueller does not disclose b. means for connecting said bottom plate to said underlying structural component of said building; d. means for connecting said plurality of vertically-disposed studs to said bottom plate; f. means for connecting said top plate to said vertically-disposed studs nor that each of said first and second chords of said shear-resisting assembly are formed from two elongated wood members, laminated together. However, it is old and well known in the art that structural components of a building are connected together via known fasteners to create a sturdy, unified structure. Nonetheless, Horowitz discloses a wall with a means which is a foundation anchor (62) for connecting a bottom plate to an underlying structural component of said building and fasteners for connecting horizontal and vertical framing members together (Col 5, Ln 34-40) to hold all of the framing members securely in a permanent connection. Therefore, it would have been obvious to a person having ordinary skill in the arts at the time of the Applicant's invention to modify the structure of Mueller to have a means for connecting said bottom plate to said underlying structural component of said building and fastening means for connecting all horizontal and vertical framing members together as taught by Horowitz to provide stable permanent connections. Furthermore, it would have been obvious to one having ordinary skill in the art at the time of invention to use laminated wood, since it has been

Art Unit: 3600

held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

Regarding claim 45, Mueller discloses a wall (Fig. 5) designed to resist lateral forces imposed on a building incorporating said wall, said building having an underlying structural component for supporting said wall, said wall comprising: a. a bottom plate (161) for resting on said underlying structural component of said building; c. a plurality of vertically-disposed studs (160a, 160b) resting on said bottom plate; e. a top plate (162) resting on said vertically-disposed studs; g. a shear-resisting assembly (details in Figs. 1 and 2) connected to said top plate (via element 164) and also for connecting to said underlying structural component and for being disposed between said top plate and said underlying structural component, said shear-resisting assembly including, 1. a planar shear-resisting element (110a), said planar shear-resisting element having a proximal face and a distal face, a top edge, a bottom edge and first and second side edges, said shear-resisting assembly also including, 2. a top strut (104) connected to said proximal face near said top edge of said shear-resisting element, and disposed substantially parallel to said top plate of said wall, 3. a bottom strut (106) connected to said proximal face near said bottom edge of said shear-resisting element, 4. a first chord (115, 120) connected to said proximal face near said first side edge of said shear-resisting element, 5. a second chord (115, 120) connected to said proximal face near said second side edge of said shear-resisting element, and 6. means (124) for connecting said top strut, said bottom strut, and said first chord and said second chord

Art Unit: 3600

to said shear resisting element, said top and bottom struts and said first and second chords forming a supporting frame for said shear-resisting element; h. means (connecting plate 164) for connecting said shear-resisting assembly to said top plate of said wall; i. means (172) for connecting said shear-resisting assembly to said underlying structural component of said building. Mueller does not disclose b. means for connecting said bottom plate to said underlying structural component of said building; d. means for connecting said plurality of vertically-disposed studs to said bottom plate; and f. means for connecting said top plate to said vertically-disposed studs. However, it is old and well known in the art that structural components of a building are connected together via known fasteners to create a sturdy, unified structure. Nonetheless, Horowitz discloses a wall with a means which is a foundation anchor (62) for connecting a bottom plate to an underlying structural component of said building and fasteners for connecting horizontal and vertical framing members together (Col 5, Ln 34-40) to hold all of the framing members securely in a permanent connection. Therefore, it would have been obvious to a person having ordinary skill in the arts at the time of the Applicant's invention to modify the structure of Mueller to have a means for connecting said bottom plate to said underlying structural component of said building and fastening means for connecting all horizontal and vertical framing members together as taught by Horowitz to provide stable permanent connections.

Regarding claim 46, Mueller already modified by Horowitz discloses the structure discussed above and further discloses that said shear-resisting assembly further comprises: a. intermediate studs (140) disposed between said top and bottom struts of

Art Unit: 3600

said shear-resisting element; b. means for connecting said intermediate studs to said top and bottom struts (via 114); c. means for connecting said intermediate studs to said structural panels; anti wherein selected intermediate studs are disposed at said joints of said structural panels, serving to connect said structural panels together (via 115 and 124).

Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller (U.S. Patent No. 5,706,626) in view of Horowitz (U. S. Patent No. 3,623,288) as applied to claim 37 above, and further in view of Haydon (U. S. Patent No. 5,279,088).

Regarding claim 38, Mueller already modified by Horowitz discloses the structure discussed above, but does not disclose epoxy within said opening in said bottom strut to ensure close contact between said foundation anchor and said bottom strut. However, Haydon discloses filling an opening with epoxy (Col 7, Ln 56-60) to further secure an anchor in the opening. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the Applicant's invention to modify the structure of Mueller already modified by Horowitz to have epoxy within an opening, such as that one in said bottom strut to ensure close contact between said foundation anchor and said bottom strut as taught by Haydon to provide additional stability to the anchor and wall connection.

Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being obvious over Mueller (U.S. Patent No. 5,706,626) in view of Horowitz (U. S. Patent No. 3,623,288) and Hardy (U.S. Patent No. 6,148,583).

Regarding claim 39, Mueller discloses a wall (Fig. 5) designed to resist lateral forces imposed on a building incorporating said wall, said building having an underlying structural component for supporting said wall, said wall comprising: a. a bottom plate (161) for resting on said underlying structural component of said building; c. a plurality of vertically-disposed studs (160a, 160b) resting on said bottom plate; e. a top plate (162) resting on said vertically-disposed studs; g. a shear-resisting assembly (details in Figs. 1 and 2) connected to said top plate (via element 164) and also for connecting to said underlying structural component and for being disposed between said top plate and said underlying structural component, said shear-resisting assembly including, 1. a planar shear-resisting element (110a), said planar shear-resisting element having a proximal face and a distal face, a top edge, a bottom edge and first and second side edges, said shear-resisting assembly also including, 2. a top strut (104) connected to said proximal face near said top edge of said shear-resisting element, and disposed substantially parallel to said top plate of said wall, 3. a bottom strut (106) connected to said proximal face near said bottom edge of said shear-resisting element, 4. a first chord (115, 120) connected to said proximal face near said first side edge of said shear-resisting element, 5. a second chord (115, 120) connected to said proximal face near said second side edge of said shear-resisting element, and 6. means (124) for connecting said top strut, said bottom strut, and said first chord and said second chord

Art Unit: 3600

to said shear resisting element, said top and bottom struts and said first and second chords forming a supporting frame for said shear-resisting element; h. means (connecting plate 164) for connecting said shear-resisting assembly to said top plate of said wall; i. Means (172) for connecting said shear-resisting assembly to said underlying structural component of said building; j. first and second anchor bolts (166a, 166b) for anchoring to said underlying structural component and are disposed near said first and second chords; k. first and second holdowns (130a, 130b) that receive said first and second anchor bolts; l. Nuts (135) that are fitted on said first and second anchor bolts and engage said first and second holdowns; m. means (132) for connecting said first and second holdowns to said first and second chords, and wherein; n. said bottom strut (106) is formed with anchor bolt openings (through which 166 goes through) through which said first and second anchor bolts pass, said anchor bolt openings in said bottom strut being notches in said bottom strut that allow said bottom strut to slide into place. Mueller does not disclose b. means for connecting said bottom plate to said underlying structural component of said building; d. means for connecting said plurality of vertically-disposed studs to said bottom plate; f. means for connecting said top plate to said vertically-disposed studs nor that said anchor bolt openings are oversized to accommodate mis-installation of said first and second anchor bolts in said underlying structural component. However, it is old and well known in the art that structural components of a building are connected together via known fasteners to create a sturdy, unified structure. Nonetheless, Horowitz discloses a wall with a means which is a foundation anchor (62) for connecting a bottom plate to an underlying structural

Art Unit: 3600

component of said building and fasteners for connecting horizontal and vertical framing members together (Col 5, Ln 34-40) to hold all of the framing members securely in a permanent connection. Therefore, it would have been obvious to a person having ordinary skill in the arts at the time of the Applicant's invention to modify the structure of Mueller to have a means for connecting said bottom plate to said underlying structural component of said building and fastening means for connecting all horizontal and vertical framing members together as taught by Horowitz to provide stable permanent connections. Furthermore, Hardy discloses a wall assembly wherein anchor bolt openings (56) are oversized to accommodate adjustment during installation (Col 4, Ln 44-58). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the Applicant's invention to modify the structure of Mueller to have anchor bolt openings that are oversized to accommodate mis-installation of said first and second anchor bolts in said underlying structural component as taught by Hardy to allow for adjustment during installation.

Regarding claim 40, Mueller already modified by Horowitz and Hardy discloses the structure discussed above and further discloses that said first and second holdowns are formed with openings (133) that are oriented in the same direction as, and are in general alignment with, said notches in said bottom strut, when said first and second holdowns are attached to said first and second chords (via 132), said openings receiving said first and second anchor bolts (166a, 166b); and b. said first and second holdowns are formed with portals (channel openings) to allow said shear-resisting assembly to be slid into place, but does not disclose that openings in the first and

second holdowns are slotted. However, Hardy discloses a wall assembly wherein anchor bolt openings (56) are slotted to accommodate adjustment during installation (Col 4, Ln 44-58). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the Applicant's invention to modify the structure of Mueller already modified by Horowitz and Hardy to have anchor bolt openings as taught by Hardy that are slotted to accommodate mis-installation of said first and second anchor bolts in said underlying structural component to allow for adjustment during installation.

Claim 43 is rejected under 35 U.S.C. 103(a) as being obvious over Mueller (U.S. Patent No. 5,706,626) in view of Horowitz (U. S. Patent No. 3,623,288), Utzman (U.S. Patent No. 5,870,870) and Yoshiyuki (JP 60-122420).

Regarding claim 43, Mueller discloses a wall (Fig. 5) designed to resist lateral forces imposed on a building incorporating said wall, said building having an underlying structural component for supporting said wall, said wall comprising: a. a bottom plate (161) for resting on said underlying structural component of said building; c. a plurality of vertically-disposed studs (160a, 160b) resting on said bottom plate; e. a top plate (162) resting on said vertically-disposed studs; and further discloses that a shear panel can be positioned within the wall between the top, bottom, and vertical studs with a plate means (164) for connecting a shear-resisting assembly to said top plate of said wall; and anchoring means (130a, 130b, 166a, 166b) for connecting said shear-resisting assembly to said underlying structural component of said building. Mueller does not disclose b. means for connecting said bottom plate to said underlying structural

Art Unit: 3600

component of said building; d. means for connecting said plurality of vertically-disposed studs to said bottom plate; f. means for connecting said top plate to said vertically-disposed studs and a shear-resisting assembly connected to said top plate and also for connecting to said underlying structural component and for being disposed between said top plate and said underlying structural component, said shear-resisting assembly including, 1. a planar shear-resisting element, said planar shear-resisting element having a proximal face and a distal face, a top edge, a bottom edge and first and second side edges, said shear-resisting assembly also including, 2. a top strut connected to said proximal face near said top edge of said shear-resisting element, and disposed substantially parallel to said top plate of said wall, 3. a bottom strut connected to said proximal face near said bottom edge of said shear-resisting element, 4. a first chord connected to said proximal face near said first side edge of said shear-resisting element, 5. a second chord connected to said proximal face near said second side edge of said shear-resisting element, and 6. edge fasteners, having shank portions, for connecting said top strut, said bottom strut, said first chord and said second chord to said shear-resisting element, said top and bottom struts and said first and second chords forming a supporting frame for said shear-resisting element; and j. boundary edging members disposed on said shear-resisting element at said top and bottom edges and said first and second side edges that are pierced by said shank portions of said edge fasteners and thereby strengthen the connection made by said edge fasteners, and wherein said boundary edging members are u-shaped channels, having a pair of legs joined by a central member that embrace said shear-resisting element,

Art Unit: 3600

each of said edge fasteners passing through each of said legs of said u-shaped channels. However, it is old and well known in the art that structural components of a building are connected together via known fasteners to create a sturdy, unified structure. Nonetheless, Horowitz discloses a wall with a means which is a foundation anchor (62) for connecting a bottom plate to an underlying structural component of said building and fasteners for connecting horizontal and vertical framing members together (Col 5, Ln 34-40) to hold all of the framing members securely in a permanent connection. Therefore, it would have been obvious to a person having ordinary skill in the arts at the time of the Applicant's invention to modify the structure of Mueller to have a means for connecting said bottom plate to said underlying structural component of said building and fastening means for connecting all horizontal and vertical framing members together as taught by Horowitz to provide stable permanent connections. Moreover, Utzman discloses a shear-resisting assembly for use in framed buildings wherein the shear-resisting assembly includes 1. a planar shear-resisting element (10), said planar shear-resisting element having a proximal face and a distal face, a top edge, a bottom edge and first and second side edges, said shear-resisting assembly also including, 2. a top strut (upper horizontal member) connected to said proximal face near said top edge of said shear-resisting element, 3. a bottom strut (lower horizontal member) connected to said proximal face near said bottom edge of said shear-resisting element, 4. a first chord (3) connected to said proximal face near said first side edge of said shear-resisting element, 5. a second chord (3) connected to said proximal face near said second side edge of said shear-resisting element, and 6. edge fasteners (1),

Art Unit: 3600

having shank portions (8), for connecting said top strut, said bottom strut, said first chord and said second chord to said shear-resisting element, said top and bottom struts and said first and second chords forming a supporting frame for said shear-resisting element. Therefore, it would have been obvious to a person having ordinary skill in the arts at the time of the Applicant's invention to substitute a shear panel assembly as taught by Utzman into the wall frame of Mueller to provide a shear panel with improved resistance to tensile and compressive loading. Finally, Yoshiyuki discloses wall with a boundary edging member (7) disposed on a shear-resisting element (4) on places that are pierced by shank portions of an edge fastener (6) and thereby strengthen the connection made by said edge fasteners, and wherein said boundary edging members are u-shaped channels, having a pair of legs (7a, 7b) joined by a central member (7) that embrace said shear-resisting element, said edge fastener passing through each of said legs of said u-shaped channels to prevent damage from forming in the areas of the fastener. Therefore, it would have been obvious to a person having ordinary skill in the arts at the time of the Applicant's invention to modify the structure of Utzman to have boundary edging members disposed on said shear-resisting element on all areas edges (i.e. at said top and bottom edges and said first and second side edges) that are pierced by said shank portions of said edge fasteners and thereby strengthen the connection made by said edge fasteners, and wherein said boundary edging members are u-shaped channels, having a pair of legs joined by a central member that embrace said shear-resisting element, each of said edge fasteners passing through each of said legs

Art Unit: 3600

of said u-shaped channels as taught by Yoshiyuki to provide reinforcement at the fastener locations.

### ***Allowable Subject Matter***

Claim 47 is allowed.

The following is an examiner's statement of reasons for allowance: None of the prior art alone or in obvious combination discloses the claimed subject matter in claim 47 of a shear wall panel within a wall framing wherein the edges of a shear resisting element in a shear resistant assembly and slotted openings in a bottom strut with epoxy in the openings.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Parslow (US 2725608) wallboard edge trim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE T. CAJILIG whose telephone number is

Art Unit: 3600

(571)272-8143. The examiner can normally be reached on Monday - Thursday from 8am - 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Canfield can be reached on (571) 272-6840. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. T. C./  
Examiner, Art Unit 3633  
3/24/08

/Robert J Canfield/  
Supervisory Patent Examiner, Art Unit 3635